

### Division of Waste Management Solid Waste Section

<b>UNIT</b>	UNIT TYPE:												
Lined MSWLF		LCID		YW		Transfer		Compost		SLAS		COUNTY: <b>Durham</b>	
Closed MSWLF	X	HHW		White goods		Incin		T&P		FIRM		PERMIT NO.: <b>32-01</b>	
CDLF		Tire T&P / Collection		Tire Monofill		Industrial Landfill		DEMO		SDTF		FILE TYPE: COMPLIANCE	

Date of Site Inspection: February 22, 2012 .Date of Last Inspection: April 7, 2009

#### **FACILITY NAME AND ADDRESS:**

City of Durham Closed MSW Landfill 2115 East Club Boulevard Durham, NC 27704

**GPS COORDINATES**: N: 36.03265 E: -78.85495

#### **FACILITY CONTACT NAME AND PHONE NUMBER:**

Simon Lobdell, Civil Engineer III– City of Durham Dept. of Water Management, Utility Engineering Division

w. 919-560-4381 x35201c. 919-200-8870f. 919-560-4479simon.lobdell@durhamnc.gov

#### **FACILITY CONTACT ADDRESS:**

Simon Lobdell, Civil Engineer III City of Durham Dept. of Water Management Utility Engineering Division 1600 Mist Lake Drive Durham, NC 27704

#### **PARTICIPANTS**

John Patrone, NCDENR – Solid Waste Section (SWS)

Simon Lobdell, Civil Engineer III– City of Durham Dept. of Water Management, Utility Engineering Division David Yates Reedy II, Senior Project Hydrogeologist – Golder Associates NC, Inc.

#### **STATUS OF PERMIT:**

Closed

#### **PURPOSE OF SITE VISIT:**

Post Closure Audit

#### **STATUS OF PAST NOTED VIOLATIONS:**

None

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#### **OBSERVED VIOLATIONS**

None

The item(s) listed above were observed by Section staff and require action on behalf of the facility in order to come into or maintain compliance with the Statutes, Rules, and/or other regulatory requirements applicable to this facility. Be advised that pursuant to N.C.G.S. 130A-22, an administrative penalty of up to \$15,000 per day may be assessed for each violation of the Solid Waste Laws, Regulations, Conditions of a Permit, or Order under Article 9 of Chapter 130A of the N.C. General Statutes. Further, the facility and/or all responsible parties may be subject to enforcement actions including penalties, injunction from operation of a solid waste management facility or a solid waste collection service and any such further relief as may be necessary to achieve compliance with the North Carolina Solid Waste Management Act and Rules.

#### ADDITIONAL COMMENTS

On February 22, 2012, John Patrone met with Simon Lobdell and David Reedy to conduct a post closure audit of the City of Durham Closed MSW Landfill located on East Club Boulevard in Durham, Durham County.

- 1. The facility ceased operation/acceptance of municipal solid waste (MSW) on December 31, 1997 in accordance with the closure date requirement of January 1, 1998, as stated in the SWS transition plan approval letter (dated 07/29/96).
- 2. The closed landfill footprint is  $\sim 85$  acres.
- 3. The facility is located behind the City of Durham Transfer Facility (32-12), via service road.
- 4. The service road also provides access to the City of Durham Large, Type 1 Solid Waste Compost (SWC) Facility (32-04) and the City of Durham Temporary Disaster Debris Staging Site (TDDSS, DS32-004), located at the old borrow site.
- 5. The facility has a landfill gas extraction/gas to energy system maintained and operated by Methane Power, Inc. The extraction system includes two blowers, a flare, and three generators. The flare operates as needed.
- 6. The landfill cap is covered with native grasses and mowed twice a year, spring and fall.
- 7. The landfill cap contains a small amount of woody vegetation. Mr. Lobdell stated that the woody vegetation will be removed by fall 2012.
- 8. The landfill does not have edge of waste markers installed. Mr. Lobdell stated that the facility was recently informed of the edge of waste marker requirement (SWS memorandum dated 05/29/09). And, stated that, permanent markers have been ordered and will be installed by May 2012.
- 9. Monitoring wells were observed and are accessible (3R, 4R, 5, 8, 9R, and 10). The wells were locked and labeled. Ensure faded labels are replaced and the cement pad is free of debris/vegetation and soil.
- 10. The facility maintains semiannual groundwater and surface water monitoring records. Monitoring was previously conducted by S&ME, Inc. and currently by Golder Associates NC, Inc. Records for groundwater and surface water monitoring conducted 11/28/11 (to be submitted), 05/19/11, 11/19/10, 07/07/10, 11/30/09, and 06/30/09 were verified. Exceedance is noted.
- 11. The facility maintains quarterly methane monitoring records. Monitoring was previously conducted by City of Durham personnel and is currently conducted by Methane Power, Inc. Records for methane monitoring conducted 02/01/12, 11/15/11, 08/23/11, 04/26/11, 02/15/11, 10/25/10, 07/12/10, 05/24/10, 02/16/10, 11/09/09, 08/05/09, 05/19/09, and 02/09/09 were verified. No exceedance noted.
- 12. Methane Monitoring, Inc. uses two GEM 2000 monitoring units. The methane monitoring units are calibrated annually. Ensure records of monitoring unit calibration and a methane monitoring standard operating procedure (SOP) are maintained for verification.
- 13. Mr. Reedy stated that the facility has been approved by the SWS to install seven new methane monitoring wells
- 14. An area of ponding water was observed along a section of berm on the east side of the landfill. Mr. Lobdell stated that a drain pipe will be installed by July 2012 to route stormwater from the cap (in the area that water is currently held) to a drainage swale.
- 15. There was no indication of erosion or runoff.
- 16. The facility maintains a copy of the 2010 2011 local government financial assurance report submitted to SWS, dated December 8, 2011. Total assured environmental costs: \$5,946,595.30.
- 17. Inquire with SWS Permitting regarding facility post closure requirements.

Phone: <u>336-771-5095</u> Fax: <u>336-771-4631</u>

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- 18. The facility has proper signage.
- 19. Access roads are of all weather construction.
- 20. The facility is secured by a locked gate.

Please contact me if you have any questions or concerns regarding this inspection report.

John Patrone

**Environmental Senior Specialist** 

Regional Representative

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Sent on: <u>March 6, 2012</u>	X	Email	Hand delivery	US Mail	Certified No. [_]

Copies: Dennis Shackelford, Eastern District Supervisor

Shawn McKee, Environmental Senior Specialist

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Chris Marriott, Waste Disposal Manager - City of Durham Solid Waste Management Dept.

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Digital pictures taken February 22, 2012 by John Patrone, DWM-SWS

(portion of) Southern side slope





(portion of) Northern view – landfill cap



Eastern side slope – area of ponding water (to be repaired by July 2012)

